

009716-11600

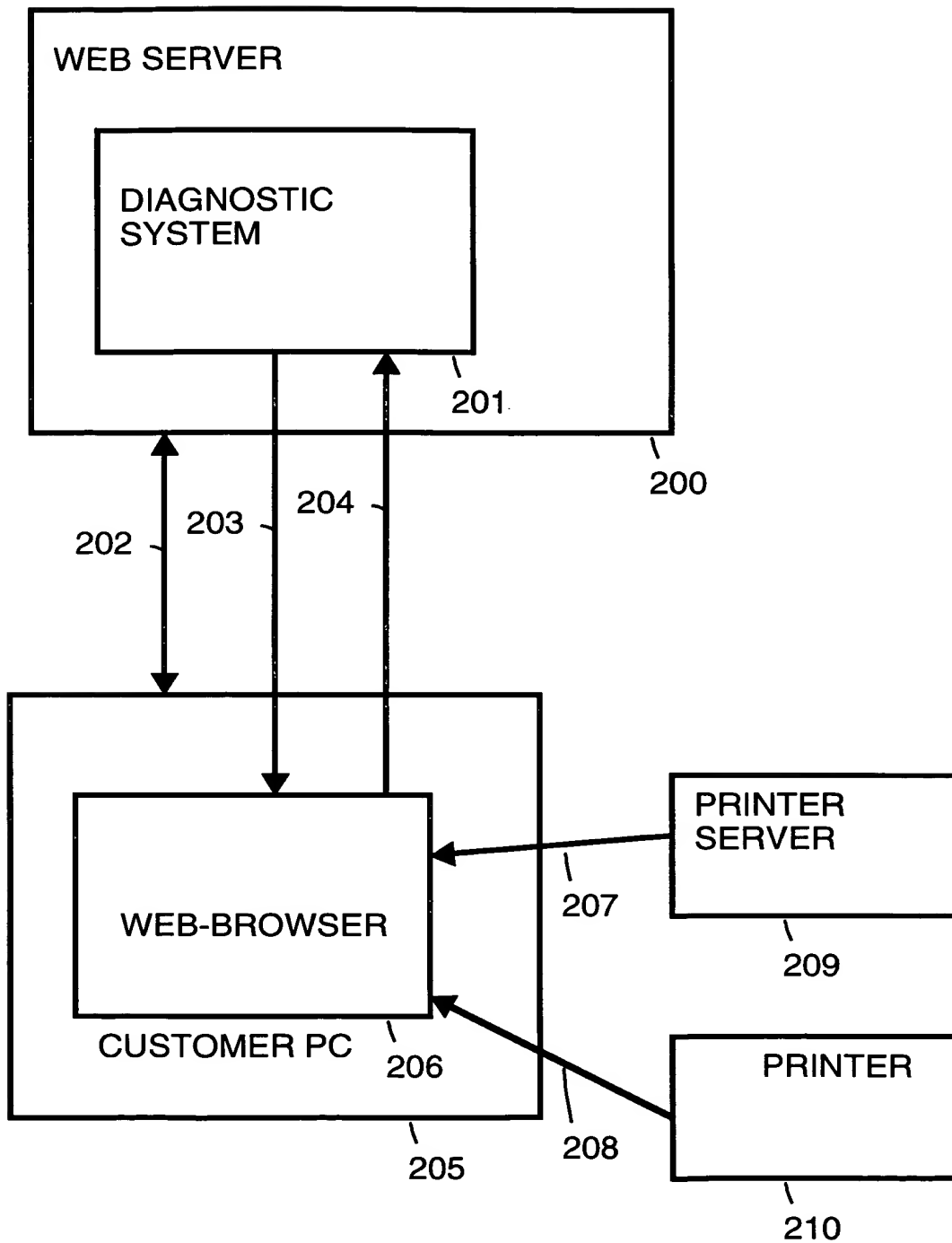
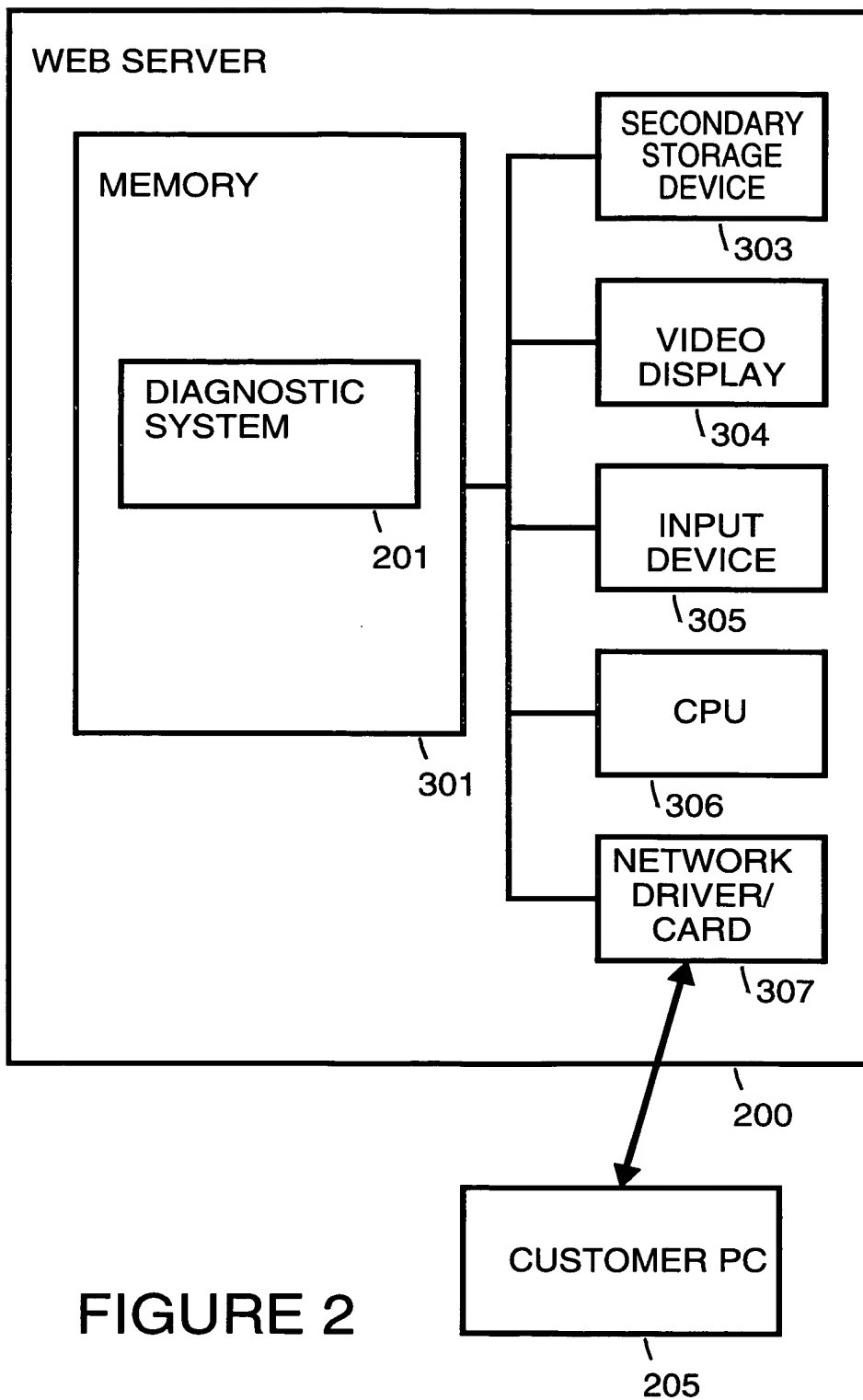


FIGURE 1

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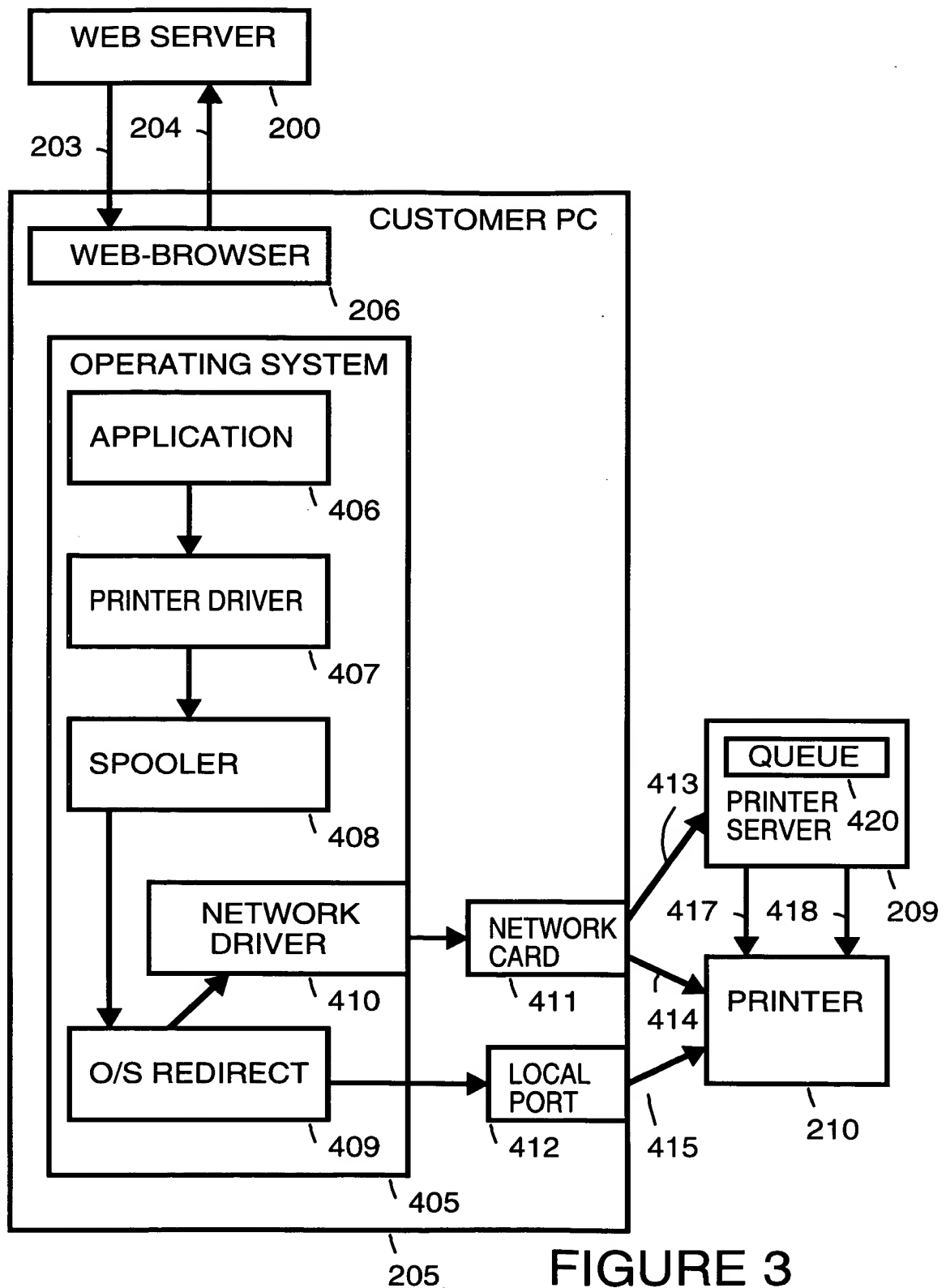


FIGURE 3

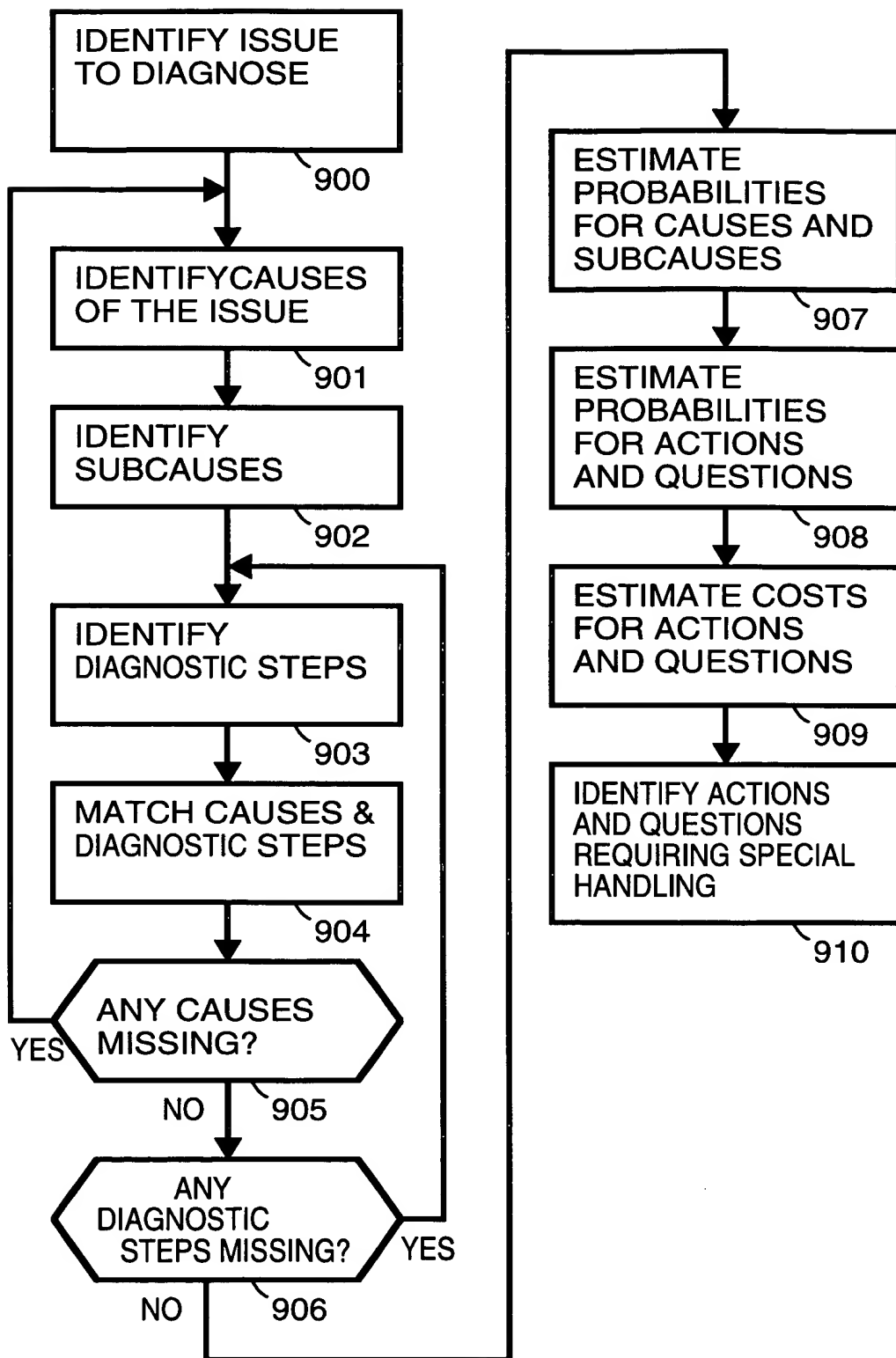


FIGURE 4

Main window

HP SACSO Authoring Tool

Name:

TSS properties

Causes:

5 A) Environmental conditions out of spec

14 B) Fuser

84 1) Fuser defective / dirty

1 2) Fuser seated improperly

14 3) Fuser worn out

28 C) Media out of spec

5 D) Other problem

95 1) Permanent problem

5 2) Temporary problem solvable by cycling

19 E) Paper path dirty

23 F) Toner Cartridge

90 1) Toner cartridge defective

10 2) Toner cartridge improperly seated

7 G) Transfer roller

85 1) Transfer roller defective / dirty

3 2) Transfer roller improperly seated

13 3) Transfer roller worn out

Troubleshooting steps:

1) (A-S) Clean inside of printer per user manual

E:100

2) (A-S) Cycle power

D2:100

3) (A-S) Ensure that environment conditions are in spec

A:100

4) (A-S) Perform user maintenance

E:100 G:100 B:100

5) (A-S) Replace fuser with HP fuser

B:100

6) (A-S) Reseat fuser

B2:100

Modules:

PM kit

Power chord not earth grounded

Print density setting

Printer driver

Setting: 300 / 600 dpi

Setting: duplex

Setting: economode

SIMM problem

Toner Cartridge

Transfer roller

Tray

Wait x minutes

Causes:

20 A) Toner Cartridge

10 1) Toner cartridge defective

5 2) Toner cartridge improperly seated

85 3) Toner distribution problem (e.g. low)

Troubleshooting steps:

1) (A-S) Remove, shake and reinsert toner cartridge

A2:100 A3:60

2) (A-S) Reset toner cartridge

A2:100

3) (A-S) Try another LJ 5Si toner cartridge

A:100

4) (Q-S) Do you see TONER LOW on the control panel ?

States: 'Yes' 'No' Default: (1 99)

A3: (90 10)

5) (Q-S) Is the printer configuration page printed light ?

States: 'Yes' 'No' Default: (0 100)

A: (100 0) Environmental conditions out of spec: (100 0) Transfer roller: (100

New cause

New action

New question

Probabilities

Export

New cause

New action

New question

Probabilities

Export

Export all

Load TSS

Close TSS

Save TSS

New TSS

Save as NET

Save as text

Notes:

Save module

New Module

Delete module

Rename module

All causes

All actions

All questions

Categories

FIGURE 5

Cause editor

Cause Editor

Name:

☐ Subcause of:

Probability:

☐ This cause is a consumable (toner cartridge, fuser, transfer roller or feed and separation rollers).

☐ Automatic data collection possible.

☐ Can be fixed by rebooting the PC.

☐ Can be fixed by power cycling the printer.

Dependency of environment:

Printer
Operating system
Printer driver
Network
Paper handling devices

Name of cause given to customers:

Delete cause OK Cancel

FIGURE 6

Cause probability editor

Cause Probability Editor

Select level and causes:

- Environmental conditions out of spec
- Fuser
- Fuser defective / dirty
- Fuser seated improperly
- Fuser worn out
- Media out of spec
- Other problem
- Permanent problem
- Temporary problem solvable by cycling
- Paper path dirty
- Toner Cartridge
- Toner cartridge defective
- Toner cartridge improperly seated

Set probabilities:

Fuser defective / dirty	84.29
Fuser seated improperly	1.429
Fuser worn out	14.29

Normalize

OK Cancel

71

72

70

FIGURE 7

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Cause category editor

Categories of cause

Select categories that the cause falls into:

- Operating System
- Consumables
- Driver
- Customer Expectat
- Printer
- Software
- Cables
- Settings
- Network
- Hardware
- Application
- Environment

OK Cancel

80

FIGURE 8

Action editor

Name:

Type:
Information gathering action

☐ Action is forced as number:

☐ Workaround.

With probability:

<input type="text" value="100"/>	<input type="text" value="100"/>
<input type="text" value="100"/>	<input type="text" value="100"/>
<input type="text" value="100"/>	<input type="text" value="100"/>

Causes "solved" by the action:

<input type="text" value="Paper path dirty"/>	<input type="text" value="Add cause"/>	<input type="text" value="Remove cause"/>
<input type="text" value="Transfer roller"/>		
<input type="text" value="Fuser"/>		

☐ Reverse action - tests a single component in different environment.

Probability that it works if none of the above causes are present

FIGURE 9

Extra information editor for actions

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FIGURE 10

Extra information editor for actions

Perform user maintenance

This action includes the following actions:

Clean inside of printer per user manual
Reseat fuser
Reseat transfer roller

Add actions Remove actions

This action is mutually exclusive with the following actions:

Add actions Remove actions

☒ This action can only be performed after a specific question has been answered.

Question: Is the user maintenance due?
State: Yes

☐ This action can only be performed after a specific question has been answered.

Question: Did you recently perform the user mainten
State: Yes

☐ If this action is performed, the following question should be fixed in the specified state.

Question: Did you recently perform the user mainten
State: Yes

☐ This action includes moving a component, and will also solve the problem if this component was seated improperly.

Component (seated improperly):
☐ The component should not be moved back in place afterwards.

Dependency of environment:

Printer
Operating system
Printer driver
Network
Paper handling devices

☒ This action includes power cycling the printer.
☐ This action includes rebooting the customer's PC.
☐ This action is irreversible.
☐ Automatic data collection possible.

OK Cancel

Action probability editor

Probability of action

Assuming that

is the only cause of

what is the probability that correctly performing the step

will solve the problem?

110

FIGURE 11

General question editor

120 General question

121 Name: Did you recently perform the user maintenance?

122 States:

Yes	8
No	92

128 Add State

126 Normalize

123 Explanation

124 Edit costs, ...

125 Extra information

126

127 Remove question

Probability changes for causes:

5	5	Temporary problem solvable by cycling power
5	28	Environmental conditions out of spec
7		Media out of spec
		Transfer roller
13		Transfer roller worn out
3	-> 25	Transfer roller improperly seated
85		Transfer roller defective / dirty
14		Fuser
14		Fuser worn out
84		Fuser defective / dirty
1	-> 15	Fuser seated improperly

Remove change

☐ Question is forced as number: 0

OK Cancel

FIGURE 12

Probability change editor

Probability Change Editor

Question: Did you recently perform the user mail 132

Cause: Transfer roller improperly seated 131

State: Yes 133

Old probability: 2.5

New probability: 25

OK

Cancel 130

134

135

FIGURE 13

Symptom question editor

141

Name: Is the printer configuration page printed light?

142

States:

Yes

No

Add State

144

Edit costs, ...

143

Explanation

145

Mutual exclusions

Causes:

Toner cartridge

Environmental conditions out of spec

Transfer roller

148

Probabilities of states given the cause:

100 0

100 0

100 0

Update

Remove

Add:

140

Probabilities of states if none of the specified causes are present:

149

0 100

146

☐ Question is forced as number: 0

147

Remove question

OK

Cancel

FIGURE 14

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Cause editor for actions and questions

152

153

154

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151

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Cost Editor

Step: Perform user maintenance

Time: 25 (minutes) ☐ Idle time?

Risk: High

Money: 0

Insult: 0

Inaccuracy: Medium

OK Cancel

FIGURE 15

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Explanation editor for causes, actions and questions

Explanation Editor

Toner cartridge

Explanation:

161

Note:

162

OK

Cancel

FIGURE 16